

ABSTRACT

Air pollution has become major issue in developing countries. Rapid urbanisation and industrialisation have exacerbated air pollution levels. Development, unregulated industrial emissions and an increase in automotive traffic, all contribute significantly to atmospheric pollution. Carbon monoxide, nitrogen oxides, and hydrocarbons have been emitted by gasoline, diesel, and compressed natural gas (CNG) automobiles. The natural trees Salvadora persica L. and Salvadora oleoides L. have been planted along the roadside to reduce air pollution. The dust accumulation, ascorbic acid content, total chlorophyll, leaf extract pH, and relative water content of Salvadora persica and Salvadora oleoides L. of control site were determined and compared with plants planted along polluted roadside areas of Alipur city. When compared to controls, evidence shows that plants grown in industrial zones have a significantly lower leaf area. Additionally, our research demonstrated that plants grown in D.G. Khan had increased ascorbic acid contents. According to a recent study, control plants showed higher pH values and total chlorophyll concentrations relative to water content than plants grown in a contaminated environment (i.e Ali Pur). The present study evaluated the expression of the LFY gene in Salvadora persica L. and Salvadora oleoides L. planted along contaminated roadside areas of Ali Pur city. DNA was isolated from leaf samples of both species using the CTAB method. Using 1% agarose gel electrophoresis, it was demonstrated that air pollution had an effect on the morphology and structure of plants. The LFY gene is expressed at a lower level in the two species planted in Ali Pur compared with the Control site plants (i.e D.G Khan). As a result, we can conclude that Salvadora persica L. and Salvadora oleoides L. planted along the contaminated roadside of Ali Pur exhibit altered genomorphpic characteristics.